

## MAYO - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Doo Lough Delta Terrace</b>
Other names used for site	Doolough, Dhulough, Dúloch, Dubh Loch
<b>IGH THEME</b>	<b>IGH7 Quaternary; IGH14 Fluvial and Lacustrine Geomorphology</b>
<b>TOWNLAND(S)</b>	<b>Glennumera, Teevnabinnia, Awntinlough</b>
<b>NEAREST TOWN</b>	<b>Louisburgh</b>
<b>SIX INCH MAP NUMBER</b>	<b>106</b>
<b>ITM CO-ORDINATES</b>	<b>484575E 767020N (location of extraction pit)</b>
<b>1:50,000 O.S. SHEET NO. 37</b>	<b>GS1 BEDROCK 1:100,000 SHEET NOS. 10, 11</b>
<b>GIS Code MO044</b>	

### Outline Site Description

Doo Lough Valley is a U-shaped glacial valley which separates the Mweelrea Mountains (west) and the Sheeffry Hills (east) in southwest County Mayo. Doo Lough Valley is ~4.5km long (north-south), and up to 2.5km wide between the >700m mountain summits that overlook the valley. Doo Lough occupies the floor of the valley.

### Geological System/Age and Primary Rock Type

The delta (kame) terraces are some 70m above sea level (A.S.L.). The glaciated landscape is Quaternary, and the kame terraces most likely late-Midlandian (18,000-14,000 years ago).

### Main Geological or Geomorphological Interest

Doo Lough Valley is a very impressive deep U-shaped valley, and is a classic example of a glaciated valley, with hanging corrie valleys, an elongated lake on the valley floor, high mountains sides bounding the valley, kame terraces and glacial striations on bedrock. Landforms of interest include a long (~1km), narrow, delta (kame) terrace at Teevnabinnia, at the southeast end of Doo Lough. The ponding (damming up) of the valley was by glaciers at its southeastern end, but it is also suggested that ponding may have been the result of high relative sea levels at the time that arose from glacio-isostatic depression (sinking of the Earth's crust due to the weight of the ice sheet). The valley records features of proglacial glaciolacustrine and glaciofluvial deposition at the margins of an ice sheet while a large glacier retreated southeastwards up the Doo Lough valley at the end of the last glacial episode.

### Site Importance - County Geological Site

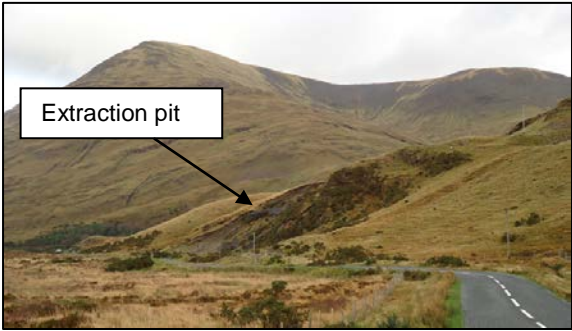
This County Geological Site is important as it is an excellent example of a glacial landform formed towards the end of the last ice age. The site is within the Mweelrea/Sheeffry/Erriff Complex NHA/SAC. Part of this site is situated within the larger Doolough Valley site (IGH7 Quaternary, IGH14 Fluvial/Lacustrine Geomorphology) which is recommended for geological NHA designation.

### Management/promotion issues

Access to the site is easy alongside the R335 road. Access to kames is possible at the extraction pit, where the exposed profiles of the kame deposits are clearly visible. No immediate threats are identified at the site, although quarrying of the gravels in the extraction pits at Teevnabinnia should be managed and restricted to the current extraction site, as intensive extraction is a major threat to the important kame terrace deposits. Quarrying has however revealed excellent examples of glacial striations.



View of the delta (kame) terrace at the SE end of Doo Lough Valley viewed from the roadside famine memorial monument at the northern end of valley. The upper surface of the terrace is  $\sim 70\text{m}$  A.S.L.



Kame (delta) terrace and roadside extraction pit at south end of Doo Lough Valley – looking N. Barrclashcame (772m), Sheeffry Hills, rises in background.



Kame (delta) terrace at south end of Doo Lough Valley – looking south. The southern end of the lake is visible on right.



Teevnabinnia extraction pit at south end of Doo Lough Valley. Bedrock exposed on left.



Teevnabinnia extraction pit at south end of Doo Lough Valley.

